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16
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1 VHTKDIFNVKRCGNGVVEEG......SHKCPDDFYVEDGIPCKERG 103
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| cgn2_6/ptodata/2/pubpaa/USO7_PUBCOMB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/USO7_PUBCOMB.pep:*
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4: /cgn2_6/ptodata/2/pubpaa/USO6_PUBCOMB.pep:*
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6: /cgn2_6/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*
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                                 GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                          - protein search, using sw model
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Sequence:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | | Appl | Appl | Appl | 2, Ap | Appl | Appli | Appli | Appli | Appli | , App | , App | Appl | Appli | Appl | , App |
|----|--------------------------|------------------|------------------|------------------|---------------------|-------------------|-----------------|-------------------|-----------------|-----------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|
| | Description | uence 12, | uence 13, | Sequence 14, | Sequence 1252, Ap | ence 22, | uence 2, | Sequence 3, Appli | Sequence 6, | Sequence 2, | Sequence 288 | Sequence 289 | equence 12, Appl | Sequence 3, Appli | equence 14, Appl | Sequence 287 |
| | Descr | Seg | Sed | Sed | Sed | Sequ | Sed | Sed | Sed | Sed | Sed | Sed | Sedu | Sed | Sequ | Seq |
| | ΩI | US-10-664-456-12 | US-10-664-456-13 | US-10-664-456-14 | US-10-408-765A-1252 | JS-09-792-200B-22 | US-10-633-202-2 | US-10-156-028-3 | US-09-978-418-6 | US-10-265-125-2 | US-10-074-978A-288 | US-10-074-978A-289 | JS-09-792-200B-12 | US-10-633-202-3 | JS-09-792-200B-14 | US-10-074-978A-287 |
| | | 12 | 12 | 12 | 16 | 0 | 12 | 14 | 10 | 14 | 15 | 15 | | 12 | о О | 15 |
| | Query Match Length DB | 766 | 787 | 820 | 820 | 528 | 726 | 726 | 176 | 722 | 722 | 722 | 446 | 535 | 523 | 729 |
| de | Query Match | 100.0 | 100.0 | 100.0 | 100.0 | 90.6 | 72.5 | 72.5 | 72.5 | 72.0 | 72.0 | 72.0 | 70.1 | 70.1 | 68.6 | 66.3 |
| | Score | 615 | 615 | 615 | 615 | 557 | 446 | 446 | 446 | 443 | 443 | 443 | 431 | 431 | 422 | 408 |
| | Result No. | | 2 | e | 4 | S | 9 | 7 | 8 | 6 | 10 | 11 | 12 | 13 | 14 | 15 |

| Sequence 6, Appli Sequence 16, Appli Sequence 204, Appl Sequence 204, | IIN FAMIL | 12; Length 766; 49; 0; Indels 0; Gaps 0; CLSNCTLTDGSTCAFGLCCKDCKF 60 |
|--|--|--|
| US-10-664-456-16 US-10-664-456-16 US-10-1074-978A-286 US-10-145-12-204 US-10-165-503-204 US-10-165-503-204 US-10-144-913-204 US-10-166-503-204 US-10-144-913-204 US-10-158-787-204 US-10-158-787-204 US-10-127-982A-204 US-10-127-982A-204 US-10-127-982A-204 US-10-127-982A-204 US-10-128-685A-204 US-10-128-685A-204 US-10-128-685A-204 US-10-128-685A-204 US-10-128-685A-204 US-10-137-998-204 US-10-146-728-204 US-10-147-499-204 US-10-123-904-204 US-10-123-904-204 US-10-133-904-204 US-10-176-918-204 US-10-176-918-204 US-10-176-918-204 US-10-176-918-204 US-10-176-918-204 US-10-176-918-204 US-10-176-918-204 US-10-176-918-204 US-10-176-918-204 | ENTS SE-DISINTEG DES 56 TION NUMBER 2001-07-25 | 615; DB No. 4.3e- matches PLKHCAKDPC |
| 58.0 | RESULT 1 US-10-664-456-12 Sequence 12, Application US/10664456 Publication No. US2004003364A1 GENERAL INFORMATION: TITLE OF INVENTION: DNAS AND POLYPEPTI TITLE OF INVENTION: DNAS AND POLYPEPTI FILE REPERENCE: 03260.0093-00304 CURRENT APPLICATION NUMBER: US/10/664,4 CURRENT PILING DATE: 2003-09-19 PRIOR FILING DATE: 1999-09-19 PRIOR APPLICATION NUMBER: 60/116,670 PRIOR PILING DATE: 1999-06-14 PRIOR FILING DATE: 1999-06-14 PRIOR FILING DATE: 1999-06-14 PRIOR FILING DATE: 1999-09-17 PRIOR FILING DATE: 1999-09-17 SOFWARE: PALENTION NUMBER: 60/116,670 PRIOR FILING DATE: 1999-09-14 PRIOR FILING DATE: 1999-09-17 SOFWARE: PALENTING DATE: 1999-09-17 SOFWARE: PALENTING DATE: 1999-09-17 SEQ ID NO 12 LENGTH: 766 TYPE: PRT | imilarity 100.0%; Pred. ; Conservative 0; Missure National Pred. VHTXDIFNVKRCGNGVVEGGECDCG |
| 16 17 18 18 18 19 18 19 19 19 19 19 19 19 19 19 19 19 19 19 | RESULT 1 US-10-664-456-12 Sequence 12, Appl Sequence 12, Appl Bublication No. U GENERAL INFORMATI TITLE OF INVENTI TITLE OF INVENTI TITLE OF INVENTI FILE REFERENCE: CURRENT APPLICATI FRIOR APPLICATI PRIOR FILING DAN PRIOR PRIOR FILING DAN PRIOR FILING FILI | Ouery Match Best Local Simi Matches 103; Qy 1 VHT Db 389 VHT Qy 61 LPS Qy 61 LPS Db 749 LPS |

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TYPE: PRT
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TITLE OF INVENTION: NEW METALLOPROTEINASE-DISINTEGRIN FAMILY MEMBERS: SVPH
TITLE OF INVENTION: NEW METALLOPROTEINASE-DISINTEGRIN FAMILY MEMBERS: SVPH
TITLE OF INVENTION: DAMS AND POLYPEPTIDES
TITLE OF INVENTION: UNBER: US/10/664,456
CURRENT APPLICATION NUMBER: US/10/664,456
CURRENT PILING DATE: 2003-09-19
PRIOR APPLICATION NUMBER: prior PILING DATE: 2001-07-25
PRIOR APPLICATION NUMBER: 60/116,670
PRIOR FILING DATE: 1999-01-21
PRIOR PILING DATE: 1999-06-14
PRIOR FILING DATE: 1999-06-14
PRIOR FILING DATE: 1999-09-27
NUMBER OF SEQ ID NOS: 33
SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO 14
                                                                                                                                    TITLE OF INVENTION: DEW METALLOPROTEINASE-DISINTEGRIN FAMILY MEMBERS: SVPH
TITLE OF INVENTION: DEW METALLOPROTEINASE-DISINTEGRIN FAMILY MEMBERS: SVPH
TITLE OF INVENTION: DEW METALLOPROTEINASE-DISINTEGRIN FAMILY MEMBERS: SVPH
TITLE OF INVENTION: DAGE METALLOPROTEINASE-DISINTEGRIN FAMILY MEMBER: 03260.0093-00304
CURRENT APPLICATION NUMBER: US/10/664,456
CURRENT APPLICATION NUMBER: US/10/664,456
CURRENT APPLICATION NUMBER: DATO: PRIOR FILING DATE: 2001-07-25
PRIOR FILING DATE: 1999-01-16
PRIOR FILING DATE: 1999-06-14
PRIOR FILING DATE: 1999-06-17
PRIOR FILING DATE: 1999-06-17
PRIOR FILING DATE: 1999-09-27
NUMBER OF SEQ ID NOS: 33
SOFTWARE: PATCHLIN VET. 2.1
SEQ ID NO 13
LENGTH APPLICATION UMBER: GALLOPE METALLOPE METALL
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100.0%; Pred. No. 4.4e-49;
ive 0; Mismatches 0;
                            Sequence 13, Application US/10664456; Publication No. US20040038364A1; GENERAL INFORMATION:
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; Sequence 14, Application US/10664456
; Publication No. US20040038364A1
; GENERAL INFORMATION:
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CORGANISM: Homo sapiens
US-10-664-456-13
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ORGANISM: Homo sapiens
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1252, Application US/10408765A
; Bedication No. US20040101874A1
; General INPORMATION:
; APPLICANT: Ghosh, Soumitra S.
; APPLICANT: Tablor, Bradford W.
; APPLICANT: Taplor, Steven W.
; APPLICANT: Taylor, Steven W.
; APPLICANT: Taylor, Steven W.
; APPLICANT: Glean, Bradford W.
; APPLICANT: Glean, Gargen W.
; APPLICANT:
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Patent No. US20020042368A1

GENERAL INFORMATION:
APPLICANT: Immunex Corporation
APPLICANT: Immalew, William C.
APPLICANT: Poindexter, Kurt
APPLICANT: Benelow, William C.
APPLICANT: Benelow, William C.
APPLICANT: Benelow, Roy A.
TITLE OF INVENTION: INTEGRIN ANTAGONISTS
FILE REFERENCE: 2958-A
CURRENT APPLICATION NUMBER: US 60/184,865
FRICH APPLICATION NUMBER: US 60/184,865
PRIOR FILING DATE: 2000-02-25
PRIOR APPLICATION NUMBER: US 60/184,865
PRIOR FILING DATE: 2000-02-25
SOFTWARE: PatentIn Version 3.1
SEQ ID NO 22
LENDTH: 528
TURNETH: 528
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US-10-408-765A-1252
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WO200043525-A2.
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14-JUN-1999;
27-SEP-1999;
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ADAM-20di
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GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
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Listing first 45 summaries
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| 3 Novel | 4 Human | 4 Human | 7 Homo | 2 Novel | 3 Human | 2 Nove | 6 Human | 2 Human | 7 Human | 4 Human | 0 Novel | 2 Human | 6 Human | 5 Novel | 7 Human | 9 Nove | 2 Human | 3 Nove | 8 Human |
| Ada45723 | Ada7615 | Ada18804 | Ada61427 | Adb19212 | Adb2775 | Ada86232 | Adb15796 | Ada47582 | Ada67377 | Adb30384 | Ada85680 | Ada96892 | Ada79196 | Ada87335 | Adb16537 | Ada91629 | Adb14692 | Adb18653 | Ada93868 |
| ADA45723 | ADA76154 | ADA18804 | ADA61427 | ADB19212 | ADB27753 | ADA86232 | ADB15796 | ADA47582 | ADA67377 | ADB3 0384 | ADA85680 | ADA96892 | ADA79196 | ADA87335 | ADB16537 | ADA91629 | ADB14692 | ADB18653 | ADA93868 |
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| 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 | 790 |
| 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 |
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| | | | | | | 32 | | | | | _ | 8 | _ | 0 | | 2 | _ | | |

ALIGNMENTS

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Snake venom protease (SVPH) nucleic acids, and polypeptides, used to identify proteins having metalloproteinase-disintegrin activity, and inhibitors of the proteins for use in therapeutics.
                                                                                                                                                                                                                                                                              Snake venom protease; SVPH; SVPH-1; metalloproteinase-disintegrin; chromosome 1; chromosome 4; immune system; splice variant.
                                                                                                                                                                                                             A snake venom protease (SVPH-1) polypeptide varaint SVPH-1a.
AAB07739 standard; protein; 766 AA
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99US-0138682P.
99US-0155798P.
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                                                                                                                                            (first entry)
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N-PSDB; AAA59304.
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Claim 13; Page 15; 105pp; English.

The present sequence represents an alternatively spliced snake venom protease-1 (SVPH-1) polypeptide, designated SVPH-1a. The SVPH polypeptides are metalloproteinsee-disintegrin protein family members. The SVPH polynucleotides can be used as probes to identify nucleic acids encoding proteins having metalloproteinsee-disintegrin activity, to identify human chromosome 1 or 4, to map genes on those chromosomes, to identify genes associated with diseases, syndromes and conditions associated with the chromosomes, syndromes and conditions activities on cell/cell interactions and the immune system. Sense or antisense oligonucleotides of SVPH can be used to inhibit gene expression

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of SVPH 1, 3, or 4. The SVPH polypeptides can be used to study cell/cell and cell/matrix interactions involved in cellular processes and in the immune system. The polypeptides may also be used to screen for inhibitors of the polypeptide's activity, which are used in therapeutics. The antibodies can be used in assays to detect the presence of the polypeptides in vitro or in vivo, and to purify the polypeptides by affinity chromatography
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Snake venom protease; SVPH; SVPH-1; metalloproteinase-disintegrin; chromosome 1; chromosome 4; immune system; splice variant.
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                                                                                                                                                                                       Length 766;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       snake venom protease (SVPH-1) polypeptide varaint SVPH-1b.
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                                                                                                                                                                                                                                                                                                                                  LPSGKVCRKEVNECDLPEWCNGTSHKCPDDFYVEDGIPCKERG 103
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                                                                                                                                                                                     100.0%; Score 615; DB 3; 100.0%; Pred. No. 6.9e-43;
                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 13; Page 15-16; 105pp; English
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                                                                                                                                                   Sequence 766 AA;
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 screen for inhibitors
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                                                                                                                                                                                                                                                              389 VHTKDIFNVKRCGNGVVEEGEECDCGPLKHCAKDPCCLSNCTLTDGSTCAFGLCCKDCKF
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immune system. The polypeptides may also be used to screen for inhil of the polypeptide's activity, which are used in therapeutics. The antibodies can be used in assays to detect the presence of the polypeptides in vitro or in vivo, and to purify the polypeptides by affinity chromatography
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Snake venom protease; SVPH; SVPH-1; metalloproteinase-disintegrin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Snake venom protease (SVPH) nucleic acids, and polypeptides, used identify proteins having metalloproteinase-disintegrin activity, a inhibitors of the proteins for use in therapeutics.
                                                                                                                                                                                      ..
                                                                                                                                                Length 787;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A snake venom protease (SVPH-1) polypeptide varaint SVPH-1c.
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                                                                                                                                                                                                                                                                                                                       449 LPSGKVCRKEVNECDLPEWCNGTSHKCPDDFYVEDGIPCKERG 491
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N-PSDB; AAA59306.
                                                                                                               Sequence 787 AA;
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Tue Sep

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Compugen Ltd.
GenCore version (c) 1993 - 2004
          Copyright
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- protein search, using sw model OM protein August 27, 2004, 22:09:37 ; Search time 39 Seconds (without alignments) 254.044 Million cell updates/sec Run on:

Title: Perfect score:

US-10-664-456-12_COPY_389_491 615 1 VHTKDIFNVKRCGNGVVEEG.....SHKCPDDFYVEDGIPCKERG 103 Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

283366 segs, 96191526 residues Searched:

Total number of hits satisfying chosen parameters:

283366

seq length: 0 seq length: 200000000 Minimum DB Maximum DB

summaries Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 su

PIR_78:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Description | ADAM 4 protein pre | disintegrin and me | metalloproteinase | testicular metallo | meltrin alpha - mo | disintegrin-like t | ADAM 6 protein pre | fertilin alpha-II | fertilin alpha-I - | lpha | fertillin beta cha | metalloproteinase | sperm surface prot | disintegrin-like m | disintegrin-like m | fertilin beta - cr | meltrin beta - mou | androgen-regulated | monocyte surface a | androgen-regulated | coagulation factor | jararhagin C precu | catrocollastatin p | probable zinc meta | disintegrin and me | metalloproteinase | disintegrin-like m | |
|---------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------|
| | 49283 | JC7850 | S71949 | 152361 | 860257 | 5253 | 48101 | 855060 | S55059 | 149281 | JC4861 | S48160 | S23403 | S38539 | 165967 | G02937 | 3258 | S28258 | 0385 | 8259 | A42972 | S24789 | S55270 | T37819 | T18900 | A59414 | G02390 | 147656 |
| ID | : | | | | Se | Φ | | | | | | | | | | | | | | | 2 A4: | | | | | | - | |
| Length DB | 473 | 655 | 099 | 732 | 903 | 713 | 735 | 825 | 905 | 600 | 734 | 617 | 357 | 524 | 670 | 735 | 150 | 116 | 826 | 789 | 429 | 571 | 609 | 512 | 952 | 419 | 814 | 756 |
| 24 | 51.1 | 49.8 | 49.8 | 49.7 | 47.8 | 47.6 | 47.0 | 45.9 | 45.9 | 43.3 | 42.8 | 42.6 | 45.4 | 45.4 | 42.4 | 42.4 | 42.1 | 41.8 | 41.6 | 41.1 | 40.9 | 40.8 | 40.8 | 40.7 | 40.6 | 0 | 39.9 | 39.8 |
| Score | 314 | 306.5 | 306.5 | 305.5 | 294 | 293 | 289. | 282 | 282 | 266 | 263.5 | 262 | 261 | 261 | 261 | 260.5 | 259 | 257 | 256 | 253 | 251.5 | 251 | 251 | 250.5 | 249.5 | 249 | 245.5 | 244.5 |
| Result No. | 1 | 7 | m | 4 | ß | 9 | 7 | 80 | σ | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 56 | 27 | 28 |

| vascular apoptosis | atrolysin A (EC 3. | metalloproteinase | ADAM 5 protein pre | platelet aggregati | ecarin precursor - | hemorrhagic protei | tMDC I protein - c | cyritestin precurs | hypothetical prote | platelet aggregati | bitan alpha - puff | bitistatin - puff | trigramin precurso | applaggin - easter | platelet-aggregati |
|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|
| JC7530 | S41607 | S48169 | 148100 | JX0265 | A55796 | A37877 | S47645 | S18968 | T26644 | JX0266 | F35982 | A34156 | A30065 | A33990 | A59409 |
| 7 | ~ | ~ | 7 | ~ | 7 | 7 | 7 | N | N | ~ | ~ | ~ | ч | N | ~ |
| | | | | | | | | | | | | | | | |
| 610 | 419 | 549 | 777 | 216 | 919 | 416 | 736 | 823 | 1042 | 209 | 83 | 83 | 480 | 71 | 71 |
| | 39.0 419 | | | | | | | | _ | | | | | 29.3 71 | 28.9 71 |
| 39.1 | | 37.7 | 37.5 | 37.2 | 37.2 | 36.9 | 35.5 | 35.5 | 35.0 | 34.5 | 31.1 | 29.8 | 29.4 | | |

ALIGNMENTS

```
G.Species: Mus musculus (house mouse)
C.Species: Musculus (house mouse)
C.Species: Musculus (house mouse)
C.Species: Musculus (house mouse)
R.Wolfsberg, T.G.; Straight, P.D.; Gerena, R.L.; Huovila; A.P.; Primakoff, P.; Myles, D.
Dov. Biol. 169, 378-383, 1955
A.Stille: ADAM, a widely distributed and developmentally regulated gene family encoding m A.Title: ADAM, a widely distributed and developmentally regulated gene family encoding m A.Status: preliminary; translated from GB/EMBL/DDBJ
A.Status: preliminary; translated from GB/EMBL/DDBJ
A.Status: preliminary
A.Status: RES>
A.Goresidnes: 1-473 cRES>
C.Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Gėne: ADAM4
C;Superfamily: mouse meltrin alpha; disintegrin homology
F;129-211/Domain: disintegrin homology <DIS>
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64 5 DIFNVKRCGNGVVEEGEECDCGPLKHCAKDPCCLSNCTLTDGSTCAFGLCCKDCKFLPSG Gaps ö 51.1%; Score 314; DB 2; Length 473; 52.6%; Pred. No. 1.7e-19; 32; Indels Query Match 51.1%; Score 314; DB Best Local Similarity 52.6%; Pred. No. 1.7e-Matches 50; Conservative 13; Mismatches ò

ö

126 NMYEVPRCGNKRVBASEKCDCGSVKDCTTDKCCEVNCEFTQGSSCAAGGCCLSCKFAPTG 185 65 KVCRKEVNECDLPEWCNGTSHKCPDDFYVEDGIPC 99 ઠે 셤 g

N.Alternate names: MDC9 protein; meltrin gamma C; Species: Homo sapiens (man)
C; Accession: JC7850
R; Hotoda, N.; Koike, H.; Sasagawa, N.; Ishiura, S.
B; Hotoda, N.; Koike, H.; Sasagawa, N.; Ishiura, S.
A; Title: A secreted form of human ADAM9 has an alpha-secretase activity for APP. A; Reference number: JC7850; MUID: 22050095; PMID: 12054541 disintegrin and metalloproteinase (ADAM) 9 protein, short form - human

A;Molecule type: mRNA A;Residues: 1-655 <HOT> A;Cross-references: GB:AF495383

C.Comment: This protein, which is a member of the a disintegrin and metalloprotease (ADA lular functions. It is proteolytically active, and has an alpha-secretase activity for a: A; Gene: adam9s C, Genetics

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disintegrin-like testicular metalloproteinase (EC 3.4.24.-) IVb - crab-eating macaque (f-C;Species: Macaca fascicularis (crab-eating macaque)
C;Species: Macaca fascicularis (crab-eating macaque)
C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jul-2000
C;Accession: 165253
R;Perry, A.C.F.; Jones, R.; Hall, L.
Bicchem, J. 312, 239-244, 1995
A;Title: Analysis of transcripts encoding novel members of the mammalian metalloprotease uctive monkey tissues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Reference number: 152361; MUID: 96077150; PMID: 7492319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Accession: 165253
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 48; Conserv
                                                                                                              uctive monkey tissues.
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                                                                                                                                                                                                A; Accession: I52361
                                                                                                                                                                                                                                                                                                                                                                                                        C;Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A, Molecule type: mRNA
A, Residues: 1-37 < AMCF>
A, Experimental source: articular chondrocyte
A, Experimental source: articular chondrocyte
C, Function:
A, Description: involved in cell/cell and cell/matrix interaction in a variety of cell ty
A, Note: membrane-bound; belongs to reprolysin family of metalloproteinases
C, Superfamily: mouse meltrin alpha; disintegrin homology
C, Keywords: hydrolase; metalloproteinase; zinc
F; 1-24/Domain: signal sequence #status predicted <SIG>
F; 25-60/Product: pre-metalloproteinase 12 #status predicted <MAT>
F; 25-59/Region: disintegrin homology <DIS>
F; 295-378/Domain: disintegrin homology <DIS>
F; 574-59/Region: epidermal growth factor-like
F; 522-642/Domain: transmembrane #status predicted <TML>
F; 522-533, 239/Binding site: zinc, catalytic (Fys, His, His, His) (inhibited) #status
F; 223-233, 239/Binding site: zinc, catalytic (His) (active) #status predicted
F; 223-0/Active site: Glu #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Experimental source: myeloma cells
R;McKie, N.; Edwards, T.; Dallas, D.J.; Houghton, A.; Stringer, B.; Graham, R.; Russell,
Biochem. Biophys. Res. Commun. 230, 335-339, 1997
A;Title: Expression of members of a novel membrane linked metalloproteinase family (ADAM A;Reference number: PC4263; MUID:97168971; PMID:9016778
A;Accession: PC4264
A;Status: nucleic acid sequence not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ţ
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testicular metalloproteinase-like, disintegrin-like, cysteine-rich protein IVa
C;Species: Macaca fascicularis (crab-eating macaque)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 21-Jul-2000
C;Accession: 152361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      110 BAYSAPSCGNKLVDAGEECDCGTPKECELDPCCEGSTCKLKSFAECAYGDCCKDCRFLPG 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 DIFNVKRCGNGVVEEGEECDCGPLKHCAKDPCCL-SNCTLTDGSTCAFGLCCKDCKFLPS 63
                                                                                                                                                                                       5 DIFNVKRCGNGVVEEGEECDCGPLKHCAKDPCCL-SNCTLTDGSTCAFGLCCKDCKFLPS
                                                                                                                   Gaps
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                             Length 655;
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                                                                                                          29; Indels
                                                                                                                                                                                                                                                                                                                                                             GKVCRKEVNECDLPEWCNGTSHKCPDDFYVEDGIPCK 100
                                                                                                                                                                                                                                                                                                                                                                                                            | :|| ::|||:||:||:||470 GTLCRGKTSECDVPEYCNGSSQFCQPDVFIQNGYPCQ 506
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                             DB 2;
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                         49.8%; Score 306.5; DB 2
49.5%; Pred. No. 9.4e-19;
iive 19; Mismatches 29
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Query Match
Best Local Similarity 49.59
.....hes 48; Conservative
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R;Perry, A.C.F.; Jones, R.; Hall, L.
Biochem. J. 312, 239-244, 1995
A;Title: Analysis of transcripts encoding novel members of the mammalian metalloprotease
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C;Date: 10-Apr-1996 #sequence_revision 19-Apr-1996 #text_change 20-Jun-2000
C;Accession: S60257
R;Yagami-Hiromasa, T.; Sato, T.; Kurisaki, T.; Kamijo, K.; Nabeshima, Y.I.; Fujisawa-Sehana Nature 377, 552-656, 1995
A;Title: A metalloprotease-disintegrin participating in myoblast fusion.
A;Reference number: S60257; MUID:96026308; PMID:7566181
A;Accession: S60257
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                                                                                                                                                                                                                      A;Molecule type: mRNA
A;Residues: 1-732 <RES>
A;Cross-references: EMBL:X87205; NID:g1061158; PIDN:CAA60663.1; PID:g1061159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A)Residues: 1-903 «YAG»
A)Residues: 1-903 «YAG»
A)Ctross-references: EMBL:D50411; NID:g1054586; PIDN:BAA08912.1; PID:g1054587
C)Superfamily: mouse meltrin alpha; disintegrin homology
E;421-503/Domain: disintegrin homology <DIS»
F;349/Active site: Glu #status predicted
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 LPSGKVCRKEVNECDLPEWCNGTSHKCPDDFYVEDGIPCKERG 103
                                                                                                                                                                                                                                                                                                                                                A;Gene: tMDC IVa
C;Superfamily: mouse meltrin alpha; disintegrin homology
F;403-485/Domain: disintegrin homology <DIS>
                                                                                                                   A; Reference number: I52361; MUID: 96077150; PMID: 7492319
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Status: preliminary; nucleic acid sequence not shown A;Molecule type: mENA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            38;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
49.7%; Score 305.5; DB 2
Best Local Similarity 52.4%; Pred. No. 1.2e-18;
Matches 54; Conservative 10; Mismatches 38
                                                                                                                                                                                        A;Status: preliminary; translated from GB/EMBL/DDBJ
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5.1.6
Compugen Ltd.
GenCore version
(c) 1993 - 2004
           Copyright
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OM protein - protein search, using sw model

August 27, 2004, 22:08:28; Search time 23 Seconds (without alignments) 233.184 Million cell updates/sec

Run on:

US-10-664-456-12_COPY_389_491 Title: Perfect score:

615 1 VHTKDIFNVKRCGNGVVEEG.....SHKCPDDFYVEDGIPCKERG 103 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

141681 seqs, 52070155 residues Searched:

141681 Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 200000000 Minimum DB Maximum DB

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt 42:* Database : Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| | Description | рошоч | 5 homo | homo | ย ยาพ | mus | mus n | Q9ukf2 homo sapien | mus n | mus m | 3 homo | 3 homo | mus m |) bos t | 1 homo | ношо | Q923w9 mus musculu | aum aum | O42596 xenopus lae | | Q60718 mus musculu | mus 1 | homo | homo | oryct | P78325 homo sapien | rattus n | Q9psz3 xenopus lae | cavie | O75078 homo sapien | mus n | Q28478 macaca fasc | homo | Q9ukq2 homo sapien |
|-----------|----------------|------------|------------|------------|------------|------------|------------|--------------------|------------|------------|------------|------------|------------|---------|--------|------|--------------------|---------|--------------------|------|--------------------|-------|------------|------------|-------|--------------------|----------|--------------------|------------|--------------------|------------|--------------------|------|--------------------|
| SUMMARIES | ΙD | AD29 HUMAN | AD20 HUMAN | AD21 HUMAN | AD21 MOUSE | AD25 MOUSE | AD26 MOUSE | AD30 HUMAN | AD24 MOUSE | AD19_MOUSE | AD19_HUMAN | AD09_HUMAN | AD12 MOUSE | | | | | | | | AD02 MOUSE | | AD22 HUMAN | AD02_HUMAN | | AD08_HUMAN | | | AD02 CAVPO | AD11_HUMAN | AD11 MOUSE | AD02_MACFA | ~ | AD28_HUMAN |
| | 98 | - | ч | ~ | Н | - | - | - | - | - | - | 7 | т | - | ~ | - | - | - | - | | - | - | - | | - | п | - | - | ٦ | н | H | - | - | - |
| | Length | 820 | 726 | 722 | 729 | 760 | 697 | 790 | 761 | 920 | 926 | 819 | 903 | 745 | 813 | 606 | 797 | 791 | 935 | 789 | 735 | 857 | 906 | 735 | 751 | 824 | 737 | 452 | 735 | 169 | 773 | 735 | 754 | 775 |
| | Ouery Match | 100.0 | 72.5 | 72.0 | 66.3 | 65.7 | 62.1 | θ. | 57.2 | - | | 49.8 | 47.8 | • | • | | 45.0 | 44.6 | 44.5 | 44.2 | 43.7 | • | 43.0 | 42.8 | 42.8 | | 42.7 | 42.5 | 42.4 | 42.4 | | 42.4 | 42.1 | 41.8 |
| | Score | 615 | 446 | 443 | 408 | 404 | 382 | 357 | 351.5 | 314 | 309 | 306.5 | 294 | 291.5 | 289 | 283 | 276.5 | 274 | 273.5 | ~ | | 265.5 | 264.5 | 263.5 | 263.5 | 263 | 262.5 | 261.5 | 261 | 261 | 261 | 260.5 | 259 | 257 |
| | Result No. | - | 7 | m | 4 | Ŋ | 9 | 7 | ω | σ | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 56 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |

| Q28475 macaca fasc Q05910 mus musculu Q84816 macaca fasc Q87534 mus musculu Q61180 rattus norv Q3527 mus musculu P30431 bothrops ja O13766 schizosacch Q13444 homo sapien Q88839 mus musculu Q997V0 r adam 15 p Q9jln6 mus musculu | |
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| AD07 MACFA AD08 MACFA AD08 MACFA AD18 MACFA AD07 MOUSE AD07 MOUSE AD07 MOUSE AD05 HWAN AD15 HWAN AD15 TAT AD28 MOUSE AD28 MOUSE | |
| 776 1926 1966 1976 1989 1988 1981 1981 1981 1981 1981 198 | |
| 2557 41.8 256 41.6 254 41.3 253 41.3 253 41.0 250 40.0 250.5 40.0 245.5 39.9 245.5 39.1 237.3 235 38.2 | |
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ALIGNMENTS

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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Xu R., Cai J., Xu T., Zhou W., Ying B., Deng K., Zhao S., Li C., "Molecular cloning and mapping of a novel ADAM gene (ADAM29) to human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -!- FUNCTION: May be involved in spermatogenesis and fertilization. Seems to be a non catalytic metalloprotease-like protein. -!- SUBCELLULAR LOCATION: Type I membrane protein. -!- ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                          Cerretti D.P., DuBose R.F., Black R.A., Nelson N.;
"Isolation of two novel metalloproteinase-disintegrin (ADAM) cDNAs that show testis-specific gene expression.";
Biochem. Biophys. Res. Commun. 263:810-815(1999).
                Q9UKF5; Q9UHP1; Q9UKF3; Q9UKF4;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-WAR-2004 (Rel. 43, Last annotation update)
ADAM 29 precursor (A disintegrin and metalloproteinase domain 29).
                                                                                                                                                          Eukaryota, Metázoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -1- TISSUE SPECIFICITY: Expressed Specifically in testes.
-1- SIMILARITY: Contains 1 EGF-like domain.
-1- SIMILARITY: Contains 1 disintegrin domain.
-1- SIMILARITY: Belongs to peptidase family M12B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sold=Q9UKF5-3; Sequence=VSP_005492, VSP_005493;
                                                                                                                                                                                                                                     SEQUENCE FROM N.A. (ISOFORMS ALPHA; BETA AND GAMMA).
TISSUE=Testis;
MEDLINE=99443746; PubMed=10512762;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Event=Alternative splicing; Named isoforms=3;
820 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IsoId=Q9UXF5-2; Sequence=VSP_005491;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IsoId=Q9UKF5-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. (ISOFORM ALPHA).
                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=Testis;
MEDLINE=20112771; PubMed=10644455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL, AF171929; AAF03777.1; -. EMBL, AF171930; AAF03778.1; -. EMBL, AF171931; AAF03779.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genomics 62:537-539(1999).
STANDARD;
                                                                                                                                          Homo sapiens (Human)
                                                                                                                                                                                                    NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Name=Gamma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=Alpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Name=Beta;
  AD29 HUMAN
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Homo sapiens (Human)
                                       820 AA;
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9 X 9 AA APPROXIMATE REPEATS.
                                    Main 1007 (18) -:

R GO; GO:0005837; C:integral to plasma membrane; TAS.

GO; GO:0007283; P:metallopeptidase activity; TAS.

InterPro; IPR001762; Disintegrin.

R InterPro; IPR00159; Pept Man.

R InterPro; IPR00159; Pept Man.

R InterPro; IPR00159; Peptidase Mals.

InterPro; IPR002870; Peptidase Mals.

R FARMY; PR00280; Deptidase Mals.

R PRMYS; PR00289; DISINTEGRIN.

R PROSITE; PS0014; ZING PR0TEASE; FALSE NEG.

R ROSITE; PS0014; ZING PR0TEASE; FALSE NEG.

R SIGNAL; Glycoproctein; Transmembrane; EGF-like domain;

R SIGNAL

R SIGNAL.

R SIGNAL.

R SIGNAL.

R PROPEP.

R PROPER.
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EXTRACELLULAR (POTENTIAL).
POTENTIAL.
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N-LINKED (GLCNAC.
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EMBL; AF134708; AAF22163.1;
HSSP; P18619; 1FVL.
MEROPS; M12.981; -.
                       Genew; HGNC:207; ADAM29.
MIM; 604778; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           448
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--- CORACTOR: Binds 1 zinc ion per subunit (Potential).
--- SUBCELLULAR LOCATION: Type I membrane protein.
--- TISSUE SPECIFICITY: Testis specific.
--- DOMAIN: A tripeptide motif (VGE) within disintegrin-like domain could be involved in the binding to egg integrin receptor and thus could mediate spermin-egg binding.
--- DOMAIN: The cysteine-rich domain encodes putative cell-fusion peptides, which could be involved in sperm-egg fusion.
--- DOMAIN: Has no obvious cleavage site for furin endopeptidase,
--- PTW: Has no obvious cleavage site for furin endopeptidase,
--- PTW: Has no obvious cleavage site for furin endopeptidase,
--- PTW: Has no obvious cleavage site for furin endopeptidase,
--- TISTELLANEOUS: May be the functional equivalent of ADAM
---- SIMILARITY: Delongs to peptidase fammily M12B.
---- SIMILARITY: Contains 1 disintegrin domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           389 VHTKDIFNVKRCGNGVVEEGEECDCGPLKHCAKDPCCLSNCTLTDGSTCAFGLCCKDCKF
                                                                                                                                                                                                                                                                                                                                                                                                                               VHTKDIFNVKRCGNGVVEEGEECDCGPLKHCAKDPCCLSNCTLTDGSTCAFGLCCKDCKF
                                                                                                                                                                                                                                                                                                                                                      0; Gaps
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04356; Q9URJ9;
16-OCT-2001 (Rel. 40, Last sequence update)
15-OCT-2004 (Rel. 43, Last annotation update)
15-MAR-2004 (Rel. 43, Last annotation update)
43ADAM 20 precursor (EC 3.4.24.-) (A disintegrin and metalloproteinase domain 20).
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MEDLINE=99453762; PubMed=10524237;

Poindexter K., Velson N., DuBose R.F., Black R.A., Cerretti D.P.,

Poindexter K., Melson N., DuBose R.F.,

"The identification of seven metalloproteinase-disintegrin (ADAM)

genes from genomic libraries.";

Gene 27:76.770(1399).

-1- FUNCTION: May be involved in sperm maturation and/or

fertilization.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                                                                                                                              DB 1; Length 820;
    P -> H (IN REF. 2).
S -> Y (IN REF. 2).
Q -> R (IN REF. 2).
M -> T (IN REF. 2).
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                                                                                                                                                                                                                                                                                                                                                      0; Indels
744 P -> H (IN REF. 2).
758 Q -> R (IN REF. 1; AAF03777
759 Q -> R (IN REF. 1; AAF03777
773 HPQLT -> QPRVM (IN REF. 2).
92753 MW; 1F54E9F8128E4C27 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 LPSGKVCRKEVNECDLPEWCNGTSHKCPDDFYVEDGIPCKERG 103
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; Pred. No. 1e-48;
0; Mismatches 0
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TISSUE=Testis;
MEDLINE=98137801; PubMed=9469942;
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Best Local Similarity 100.0%;
Matches 103; Conservative 0
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STATE: MA
COUNTRY: US
ZIP: 02109
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Matches 69; C
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                                                                                                                                                               US-10-664-456-12_COPY_389_491
615
1 VHTKDIFNVKRCGNGVVEEG.....SHKCPDDFYVEDGIPCKERG 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4, Sequence 6, Sequence 6, Sequence 2, Sequence 2, Sequence 2, Sequence 2, Sequence 8, Sequence 8, Sequence 1,
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Sequence 2,
Sequence 4,
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(cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
(cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
(cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
(cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
(cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
(cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
(cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
              GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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US-09-548-79B-4
US-09-632-09B-2
US-09-632-09B-2
US-09-632-09B-4
US-09-548-79B-6
US-08-765-243-4
US-08-765-243-6
PCT-US95-07295-6
US-08-765-243-6
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US-08-447-407-1
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US-08-243-542-2
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US-08-484-355-2
US-08-243-542-3
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Maximum Match 100%
Listing first 45 summaries
                                                                         - protein search, using sw model
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seq length: 200000000
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Match
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Sequence 1, Appli
Sequence 30, Appl
Sequence 15, Appl
Sequence 4, Appli
Sequence 2, Appli
Sequence 1, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 10, Appli
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Sequence 2, Al
Sequence 2, Al
Sequence 2, Al
Sequence 3, Al
Sequence 6, Al
Sequence 8, Al
Sequence 10, Al
Sequence 10, Al
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APPLICANT: SLOCOMBE, Patrick, M.
TITLE OF INVENTION: DNA SEQUENCES CODING FOR A
TITLE OF INVENTION: HUMAN METALLOPROTEINASE AND VARIANTS THEREOF
NUMBER OF SEQUENCES: 4
ADDRESSE: DIKE, BRONSTEIN, ROBERTS & CUSMAN, LLP.
STREET: 130 Water Street
CITY: BOSTON
   Sequence 4
Sequence 4
Sequence 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Cerretti, Douglas P.
TITLE OF INVENTION: SVPH.-8 DNA and Polypeptides
FILE REFERENCE: 03260.0050-00304
CURRENT APPLICATION NUMBER: US/09/617,145
CURRENT FILING DATE: 2000-07-14
PRIOR APPLICATION NUMBER: 60/071,505
PRIOR FILING DATE: 1998-01-14
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin Ver. 2.0
LENGTH: 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65 KVCRKEVNECDLPEWCNGTSHKCPDDFYVEDGIPCKE 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72.0%; Score 443; DB 4;
71.1%; Pred. No. 4.1e-32;
tive 15; Mismatches 13
US-08-477-407-4
US-08-484-355-4
US-09-786-256C-1
US-09-786-256C-15
US-09-786-256C-32
US-09-813-819-4
US-09-920-048-4
US-09-920-048-4
US-09-920-048-4
US-09-920-048-4
US-09-351-414-2
US-09-351-414-2
US-09-351-414-2
US-09-351-414-2
US-09-350-048-4
US-09-026-001A-6
US-09-026-001A-10
US-09-026-001A-10
US-09-026-001A-10
US-09-026-001A-10
US-09-026-001A-10
US-09-026-001A-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-617-145-2; Sequence 2, Application US/09617145; Sequence 2, Patent No. 6486956; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3, Application US/08036443; Patent No. 5883241; GENERAL INFORMATION:
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US-09-617-145-2
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420 CGNGFVEAGEECDCGPGDEC-RDLCCFAHNCSLRPGAQCAHGDCCVRCLLKPAGALCRQA 478
                                                   71 VNECDLPEWCNGTSHKCPDDFYVEDGIPC 99
                                                                              479 MGDCDLPEFCTGTSSHCPPDVYLLDGSPC
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US-09-548-797B-5
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Sequence 4, Application US/09548797B

Patent No. 6683165

GENERAL INFORMATION:

TITLE OF INVENTION: NOVEL HUMAN GENE RELATING TO RESPIRATORY DISEASES AND

TITLE OF INVENTION: 00BSSITY

FILE REFERENCE: 2976-4039

CURRENT APPLICATION NUMBER: US/09/548,797B

PRIOR APPLICATION NUMBER: 60/129,391

PRIOR PILING DATE: 1999-04-13

NUMBER OF SEQ ID NOS: 170

SEQ ID NO 4

LENGTH: 746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 TKDIFNVKRCGNGVVEEGEECDCGPLKHCAKDPCC-LSNCTLTDGSTCAFGLCCKDCKFL 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 50.2%; Score 309; DB 2; Length 75 Best Local Similarity 51.5%; Pred. No. 3.9e-20; Matches 51; Conservative 16; Mismatches 30; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 PSGKVCRKEVNECDLPEWCNGTSHKCPDDFYVEDGIPCK 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           294 APGILCREQARQCDLPEFCIGKSPHCPINFYQMDGTPCE 332
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FRASEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/836,443
FILING DATE: 01-MAY-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 9709420
FILING DATE: 05-SEP-1997
APPLICATION NUMBER: 9612145.4
FILING DATE: 11-JUN-1996
APPLICATION NUMBER: 9526230.9
FILING DATE: 11-JUN-1996
APPLICATION NUMBER: 9526230.9
FILING DATE: 11-JUN-1996
APPLICATION NUMBER: 9526230.9
FILING DATE: 11-JUN-1996
APPLICATION NUMBER: 34,235
REGISTRATION NUMBER: 34,235
REGISTRATION NUMBER: 34,235
REGISTRATION NUMBER: 34,235
REGISTRATION NUMBER: 31,235
REFERENCE/DOCKET NUMBER: 34,235
TELEPHONE: 617-523-5440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 3: SEQUENCE CHARACTERISTICS: LENGTH: 751 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
MOLECULE TYPE: No. 5883241e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single
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US-09-548-797B-4
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STRANDEDNESS: sin
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Best Local Similarity
Matches 49; Conserva
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Sequence 5, Application US/09548797B

Sequence 5, Application US/09548797B

Parent No. 6683165

GENERAL INFORMATION:

APPLICANT: KEITH.

TITLE OF INVENTION: OBESITY

TITLE OF INVENTION: OBESITY

TITLE REPERENCE: 2976-4039

CURRENT APPLICATION NUMBER: US/09/548,797B

CURRENT FILING DATE: 2002-11-26

PRIOR APPLICATION NUMBER: 60/129,391

PRIOR FILING DATE: 1999-04-13

NUMBER OF SEQ ID NOS: 170

SEQ ID NO S: 170

LENGTH: 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                              420 CGNGFVEAGEECDCGPGGCC-RDLCCFAHNCSLRPGAQCAHGDCCVRCLLKPAGALCRQA 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12 CGNGVVEEGEECDCGPLKHCAKDPCCLS-NCTLTDGSTCAFGLCCKDCKFLPSGKVCRKE 70
                                                                                                                                                                                                                                                                                                                                                                                                                                     12 CGNGVVERGERCDCGPLKHCAKDPCCLS-NCTLTDGSTCAFGLCCKDCKFLPSGKVCRKE 70
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47.0%; Score 289; DB 4; Length 787;
Best Local Similarity 55.1%; Pred. No. 2.5e-18;
Matches 49; Conservative 12; Mismatches 26; Indels
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019050 oryctolagus
QBCgq1 mms musculu
QBCgq1 mms musculu
QBCgq1 mms maccul
Q28485 macaca fasc
Q51477 macaca fasc
Q800w6 homo sapien
Q286477 macaca fasc
019056 papio anubi
Q80477 macaca fasc
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Q80471 coturnix co
Q28477 macaca fasc
019056 papio anubi
Q80410 cavia porce
Q804652 papio anubi
Q804652 papio anubi
Q804555 mus musculu
Q80455 mus musculu
Q80410 cavia porce
Q80410 cavia porce
Q9215 drosophila
Q90515 drosophila
Q90471 drosophila
Q90477 pongo pygma
Q80490 bothrops er
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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SEQUENCE FROM N.A.

C. C.;

C. C.;
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Last annotation update)
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Pred. No. 2.5e-45;
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081104;
01-JUN-2003 (TrEMBLrel. 24, Cr
01-JUN-2003 (TrEMBLrel. 24, Le
01-OCT-2003 (TrEMBLrel. 25, Le
ADAM29.
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72.7%;
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Best Local Similarity
   NCBI_TaxID=10090;
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Q8nfm6 homo sapien
                                                                                                                                                                                               August 27, 2004, 22:01:22; Search time 116 Seconds (without alignments) 280.158 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                             615
1 VHTKDIFNVKRCGNGVVEEG.....SHKCPDDFYVEDGIPCKERG 103
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                              5.1.6
Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1017041 segs, 315518202 residues
                                                                                                                                                                                                                                                                                                                     US-10-664-456-12_COPY_389_491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                              GenCore version
Copyright (c) 1993 - 2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                           OM protein - protein search, using sw model
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QBBMR4
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QBCDV3
QB11Q3
QB11Q3
QB11Q3
QB101Q4
QB01072
QB01074
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sp_phage:*
sp_plant:*
sp_virus:*
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Gapop 10.0 , Gapext 0.5
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sp_human:*
sp_invertebrate:*
sp_mammal:*
sp_mhc:*
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length: 2000000000
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Result No.

Bed sed

Minimum DB Maximum DB

Database

Title: Perfect score:

Run on:

Sequence:

Scoring table:

Searched:

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SEQUENCE FROM N.A.
                                                                                                                                         NCBI_TaxID=10090;
               01-MAR-2003
01-OCT-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 IFNVKRCGNGVVEEGEECDCGPLKHCAKDPCCLSNCTLTDGSTCAFGLCCKDCKFLPSGK 65
                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The FANTOM Consortium, the RIKEN Genome Exploration Research Group Phase I & II Team, the RIKEN Genome Exploration Research Group Phase I & II Team, "Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs.", Nature 420:653-573 (2002).

Nature ARO29756; BAC26600.1, ---
MGD, MGI:105985; Adam26.
                                                      1 VHTKDIFNVKRCGNGVVEEGEECDCGPLKHCAKDPCCLSNCTLTDGSTCAFGLCCKDCKF
 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R MGDJ MGJI105983; Addanio.

R GO, GO:0008270; F:adanio.

R GO, GO:0008270; F:ainc ion binding; IEA.

R GO; GO:0008270; F:ainc ion binding; IEA.

GO: GO:0006508; P:proteolysis and peptidolysis; IEA.

GO: GO:0006508; P:proteolysis and peptidolysis; IEA.

InterPro; IPR001762; Disintegrin.

R InterPro; IPR001890; Peptidase M12B.

R InterPro; IPR002800; Peptidase M12B.

R InterPro; IPR005800; Peptidase M12B.

R Pfam; PF01201; Pep M12B integrin; 1.

R PRINTS; PR00189; DISINTEGRIN.

R PRODITS; PS00427; DISINTEGRIN.

R PROSITE; PS00427; DISINTEGRIN.

 14; Mismatches 13; Indels
                                                                                                                            61 LPSGKVCRKEVNECDLPEWCNGTSHKCPDDFYVEDGIPC 99
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           449 VCRKEKNECDLPEWCNGTSAECPGDVYKADGIPCSGEG 486
                                                                                                                                                                                                                                                                       01-WAR-2003 (TrEMBLrel. 23, Created)
01-WAR-2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
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                                                                                                                                                                                                                                     697 AA
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                                                                                                                                                                                                                                     PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=C57BL/6J; TISSUE=Testis;
MEDLINE=22354683; PubMed=12466851;
                                                                                                                                                                                                                                                                                                                              imilar to ADAM 26 precursor.
 72; Conservative
                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QBBMR5
QBBMR5;
                                                                                                                                                                                                                                                          Q8BMR4;
                                                                                                                                                                                                                                       O8BMR4
   Matches
                                                                                                                                                                                                   RESULT 2
QBBMR4
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TRAINCE FROM N.A.

SEQUENCE FROM N.A.

THE FAUTOM CORRECTION,

The RIKEN Genome Exploration Research Group Phase I & II Team;

The RIKEN Genome Exploration Research Group Phase I & II Team;

The RIKEN Genome Exploration Research Group Phase I & II Team;

Analysis of the mouse transcriptome based on functional annotation of Ko, 770 full-langth CDNAs.";

NG 770 full-langth CDNAs.";

TRUE 420:563-573(2002)

TRUE 420:563-573(2002)

TRUE 420:563-573(2002)

TRUE 60,770 full-langth CDNAs.";

TRUE 60,70 full-langth CDNAs.";

TRUE 60,70 full-langth CDNAs.";

TRUE 60,70 full-langth CDNAs.";

TRUE 60,70 full-langth CDNAs.";

TRUE 70, 60:000422; F:metalloendopeptidase activity; IEA.

GO; GO:000422; F:metalloendopeptidase activity; IEA.

TRUE 60,70 full-langth CDNAs.";

TRUE 70:000422; F:metalloendopeptidase activity; IEA.

TRUE 70:000422; F:metalloendopeptidase activity; IEA.

TRUE 70:000422; F:metalloendopeptidase MD2B.

TRUE 70:000422; F:
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STRAIN=CS7BL/6;
MEDLINE=22030469; PubMed=12034510;
Brachvogel B., Reichenberg D., Beyer S., Jehn B., von der Mark K.,
Bielke W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (Mouse).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                 Mus musculus (Mouse).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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(TrEMBLrel. 23, Created)
(TrEMBLrel. 23, Last sequence update)
(TrEMBLrel. 25, Last annotation update)
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Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               458 NECDLPEWCNGTSAECPGDVYKADGIPCSGEG 489
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Prodom; PD000664; Disintegrin; 1.
SMART; SM00608; ACR; 1.
SMART; SM00050; DISIN; 1.
PROSITE; PS50215; ADAM_MEPRO; 1.
PROSITE; PS50214; DISINTEGRIN 1; 1.
PROSITE; PS50214; DISINTEGRIN 1; 1.
PROSITE; PS00142; ZINC PROTEAEE; 1.
SEQUENCE 702 AA; 79278 MW; 3197686
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                                                                                                                                               Similar to ADAM 26 precursor.
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